## **BACCALAUREATE PROGRAM TRANSFER FRAMEWORKS**

# PHYSICAL SCIENCES

Programs (Majors) Offered in the Physical Sciences*	Universities Offering the Programs	Degrees Offered
Chemistry, General	EKU	BA/BS
	KSU	BS
	MoSU	BS
	MuSU	BA/BS
	NKU	BA/BS
	UK	BA/BS
	UL	BA/BS
	WKU	BS
Earth and Planetary Sciences	MuSU	BA/BS
Geology	EKU	BA/BS
•	MoSU	BS
	MuSU	BA/BS
	NKU	BA/BS
	UK	BS
	WKU	BS
Physics, General	EKU	BS
•	MoSU	BS
	MuSU	BA/BS
	NKU	BA/BS
	UK	BA/BS
	UL	BA/BS
	WKU	BS

## **BACCALAUREATE PROGRAM TRANSFER FRAMEWORKS**

# BIOLOGICAL SCIENCES

Program (Majors) Offered in the Biological Sciences*	Universities Offering the Program	Degrees Offered
Agricultural Biotechnology	UK	BS
Biochemistry	WKU	BS
Biology, General	EKU	BS
	KSU	BS
	MoSU	BS
	MuSU	BA/BS
	NKU	BA/BS
	UK	BA/BS
	UL	BA/BS
	WKU	BS
Ecology	EKU	BS
	MoSU	BA/BS
Microbiology/Bacteriology	EKU	BS
Recombinant Genetics	WKU	BS

<sup>\*</sup>A seperate framework is included in this section for each program (major) on the list.

### **BIOCHEMISTRY -- CIP 26.0202**

#### TRANSFER MATRIX: Requirements of the Sending Institution

General Education Transfer Component (33 hours) + Institutional General Education (15 hours) = General Education Total (48 hours) General Education Total (48 hours) + Specialty (12 hours) = Transfer Framework (60 hours)

NOTES: A shaded column indicates the college or university does not confer a baccalaureate degree in this program.

However, course numbers in shaded columns indicate that the transfer framework may be completed at that institution.

The General Education Transfer Component should be completed according to the general education requirements for this major at the sending institution, unless specific course recommendations are listed.

General Education courses may also be counted toward the major, a minor, or a second major.

	EKU	KSU	MOSU	MUSU	NKU	UK	UL	WKU	CC
General Education Transfer Compo									
Communication - 9 hrs									
Written Communication - 6 hrs									
Oral Communication - 3 hrs									
Humanities - 6 hrs									
Behavioral/Social Sciences - 9 hrs									
Natural Sciences - 6 hrs									
Mathematics - 3 hrs								MATH 126	MA 113
Minimum College Algebra									
Other Institutional General Education									
Requirements - up to 15 hrs									
Specialty Transfer Component 12	hours								
Biology - 4-5 hrs								BIOL 120* & 121*	
Chemistry - 9-10 hrs									CHE 105* & 107*
								121* & 222* & 223	
Organic Chemistry - 5 hrs								CHEM 340 & 341	CHE 230* & 231*

<sup>\*</sup> Course may also meet institutional general education requirements.

Up to 6 hours of science coursework included in the Specialty Component meet institutional natural science general education requirements.

## **CHEMISTRY, GENERAL -- CIP 40.0501**

TRANSFER MATRIX: Requirements of the Sending Institution

General Education Transfer Component (33 hours) + Institutional General Education (15 hours) = General Education Total (48 hours) General Education Total (48 hours) + Specialty (12 hours) = Transfer Framework (60 hours)

NOTES: A shaded column indicates the college or university does not confer a baccalaureate degree in this program.

However, course numbers in shaded columns indicate that the transfer framework may be completed at that institution.

The General Education Transfer Component should be completed according to the general education requirements for this major at the sending institution, unless specific course recommendations are listed.

General Education courses may also be counted toward the major, a minor, or a second major.

An 'M' below indicates that a minor, second major, or area of concentration outside the major is required.

	EKU	KSU	MOSU	MUSU	NKU	UK	UL	WKU	CC
General Education Transfer Compo	onent 48 hours								
Communication - 9 hrs									
Written Communication - 6 hrs									
Oral Communication - 3 hrs									
Humanities - 6 hrs									
Behavioral/Social Sciences - 9 hrs									
Natural Sciences - 6 hrs									
Mathematics - 3 hrs	MAT 124	MAT 201	MATH 175	MAT 250	MAT 120	MA 113	MATH 205	MATH 126	MA 113
Minimum College Algebra									
Other Institutional General Education									
Requirements - up to 15 hrs									
Specialty Transfer Component 12	2 hours								
Chemistry - 8-10 hrs	CHE 111* & 112	CHE 101* & 102	CHEM 111* &	CHE 121* & 122*	CHE 120* & 120L*	CHE 105* & 107*	CHEM 201* & 202*	CHEM 120* & 121*	CHE 105* & 107*
			112*		& 121* & 121L*	& 115*	& 205 *	& 222* & 223*	& 115*
Physics - 8-10 hrs	PHY 201* & 202	PHY 211* & 212	PHY 231* & 231A	PHY 235* & 236 &	PHY 220* & 221*	PHY 231* & 241*	PHYS 295* & 298*	PHY 250* & 251* &	PHY 231* & 241*
			* & 232* & 232A*	255* & 256		& 232* & 242*	& 296* & 299*	270* & 271*	& 232* & 242*
Calculus II - 3-5 hours	MAT 224	MAT 202	MATH 275	MAT 308	MAT 220	MA 114	MATH 206	MATH 227	MA 114

<sup>\*</sup> Course may also meet institutional general education requirements.

Up to 6 hours of science coursework may meet institutional natural science general education requirements.

### **EARTH AND PLANETARY SCIENCES -- CIP 40.0703**

TRANSFER MATRIX: Requirements of the Sending Institution

General Education Transfer Component (33 hours) + Institutional General Education (15 hours) = General Education Total (48 hours) General Education Total (48 hours) + Specialty (12 hours) = Transfer Framework (60 hours)

NOTES: A shaded column indicates the college or university does not confer a baccalaureate degree in this program.

However, course numbers in shaded columns indicate that the transfer framework may be completed at that institution.

The General Education Transfer Component should be completed according to the general education requirements for this major at the sending institution, unless specific course recommendations are listed.

General Education courses may also be counted toward the major, a minor, or a second major.

An 'M' below indicates that a minor, second major, or area of concentration outside the major is required.

	EKU	KSU	MOSU	MUSU	NKU	UK	UL	WKU	CC
General Education Transfer Compo	nent 48 hours								
Communication - 9 hrs									
Written Communication - 6 hrs									
Oral Communication - 3 hrs									
Humanities - 6 hrs									
Behavioral/Social Sciences - 9 hrs									
Natural Sciences - 6 hrs									
Mathematics - 3 hrs									
Minimum College Algebra									
Other Institutional General Education									
Requirements - up to 15 hrs									
Specialty Transfer Component 12	hours								
Geology - 8 hrs				GSC 101 & 102					GLY 140 & 142
Biology - 4-5 hrs				BIO 199 or BIO					BIO 150 & 151
				121 or 122					
Chemistry - 3-5 hrs				CHE 105 or 121					CHE 105
Physics - 5 hrs				PHY 120					PHY 211

<sup>\*</sup> Course may also meet institutional general education requirements.

Up to 6 hours of science coursework meet institutional natural science general education requirements.

#### **GEOLOGY -- CIP 40.0601**

#### TRANSFER MATRIX: Requirements of the Sending Institution

General Education Transfer Component (33 hours) + Institutional General Education (15 hours) = General Education Total (48 hours) General Education Total (48 hours) + Specialty (12 hours) = Transfer Framework (60 hours)

NOTES: A shaded column indicates the college or university does not confer a baccalaureate degree in this program.

However, course numbers in shaded columns indicate that the transfer framework may be completed at that institution.

The General Education Transfer Component should be completed according to the general education requirements for this major at the sending institution, unless specific course recommendations are listed.

General Education courses may also be counted toward the major, a minor, or a second major.

An 'M' below indicates that a minor, second major, or area of concentration outside the major is required.

	EKU	KSU	MOSU	MUSU	NKU	UK	UL	WKU	CC
General Education Transfer Compo	nent 48 hours								
Communication - 9 hrs									
Written Communication - 6 hrs									
Oral Communication - 3 hrs									
Humanities - 6 hrs									
Behavioral/Social Sciences - 9 hrs									
Natural Sciences - 6 hrs									
Mathematics - 3 hrs	MAT 124		MATH 175	MAT 250	MAT 120 or 121 &	MA 113		MATH 126	MA 113
Minimum College Algebra					122				
Other Institutional General Education									
Requirements - up to 15 hrs									
Specialty Transfer Component 12	hours								
Physical Geology - 3-4 hrs	GLY 108*		GEOS 100* &	GSC 101*	GLY 110* & 110L*	GLY 101* & 111*		GEOL 111* &	GLY 101* & 111*
			107*					113*	
Historical Geology - 3 hrs	GLY 109*		GEOS 201*	GSC 102*	GLY 115* & 115L*			GEOL 112*	GLY 102* & 112*
Chemistry - 9-10 hrs	CHE 111* & 112		CHEM 111* &	CHE 121* & 122*	CHE 120* & 120L*	CHE 105* & 107*		CHEM 120* &	CHE 105* & 107*
			112*		& 121* & 121L*	& 115*		121* & 222* &	& 115 *
								223*	
Mineralogy - 4-5 hrs	GLY 309		GEOS 262*	GSC 201	GLY 303 & 303L	GLY 260		GEOL 330	GLY 260

<sup>\*</sup> Course may also meet institutional general education requirements.

Up to 6 hours of science coursework may meet institutional natural science general education requirements.

## PHYSICS, GENERAL -- CIP 40.0801

#### TRANSFER MATRIX: Requirements of the Sending Institution

General Education Transfer Component (33 hours) + Institutional General Education (15 hours) = General Education Total (48 hours) General Education Total (48 hours) + Specialty (12 hours) = Transfer Framework (60 hours)

NOTES: A shaded column indicates the college or university does not confer a baccalaureate degree in this program.

However, course numbers in shaded columns indicate that the transfer framework may be completed at that institution.

The General Education Transfer Component should be completed according to the general education requirements for this major at the sending institution, unless specific course recommendations are listed.

General Education courses may also be counted toward the major, a minor, or a second major.

An 'M' below indicates that a minor, second major, or area of concentration outside the major is required.

	EKU	KSU	MOSU	MUSU	NKU	UK	UL	WKU	CC
				М	•	M	•	M	
General Education Transfer Compo	nent 48 hours								
Communication - 9 hrs									
Written Communication - 6 hrs									
Oral Communication - 3 hrs									
Humanities - 6 hrs									
Behavioral/Social Sciences - 9 hrs									
Natural Sciences - 6 hrs									
Mathematics - 3 hrs	MAT 124		MATH 175	MAT 250	MAT 120 or (121	MA 113	MATH 205	MATH 126	MA 113
Minimum College Algebra					& 122)				
Other Institutional General Education									
Requirements - up to 15 hrs									
Specialty Transfer Component 12	? hours								
Physics - 10-12 hrs	PHY 201* & 202		PHY 231* &	PHY 235* & 236*	PHY 220* & 221*	PHY 231* & 241*	PHYS 295* &	PHYS 250* &	PHY 231* & 241*
-			231A* & 232* &	& 255* & 256*	& 222*	& 232* & 242*	298* & 296 & 299	251* & 260* &	& 232* & 242*
			232A*					261* & 270* &	
Calculus 8-10 hrs	MAT 224 & 225		MATH 275 & 276	MAT 308 & 309	MAT 220 & 320	MA 114 & 213	MATH 206 & 301	MATH 227 & 320	MA 114 & 213

<sup>\*</sup> Course may meet institutional general education requirements.

Up to 6 hours of science coursework may meet institutuional natural science general education requirements.